ABSTRACT

An apparatus 115 for processing a substrate 20, comprises an integrated pumping system 155 having a high operating efficiency, small size, and low vibrational and noise levels. The apparatus 115 comprises a chamber, such as a load-lock chamber 110, transfer chamber 115, or process chamber 120. An integrated and local pump 165 is abutting or adjacent to one of the chambers 110, 115, 120 for evacuating gas from the chambers. The pump has an inlet 170 connected to a chamber 110, 115, 120, and an outlet 175 that exhausts the gas to atmospheric pressure. Preferably, the pump 165 comprises a pre-vacuum pump or a low vacuum pump.

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